

In the Specification

Please amend the paragraph on page 1, beginning at line 4 of the specification as follows:

This patent application is related to copending PCT Patent Applications Ser. Nos. US00/16021 and US00/16024, having respective attorney docket nos. FP-68000/JAS/SMK and FP-67999/JAS/SMK, with respective titles MEMS TRANSMISSION AND CIRCUIT COMPONENTS and RECONFIGURABLE QUASI-OPTICAL UNIT CELLS, and filed on June 9, 2000. These copending applications are hereby incorporated by reference.

Please amend the paragraph on page 4, beginning at line 8 of the specification as follows:

In summary, the present invention comprises an optical network, an optical device, and one or more MEMS optical components. The optical network comprises one or more optical input sources, one or more optical output collectors, and the optical device. The optical device is optically coupled between the one or more optical input sources and the one or more optical output collectors. The optical device is formed on [a] an integrated MEMS chip that is oriented in a horizontal plane. The optical device comprises the one or more MEMS optical components formed on the chip. In fact, each MEMS optical component may be monolithically fabricated on the chip.

Please amend the paragraph on page 31, beginning at line 13 of the specification as follows :

Referring back to Figs. 18 to 21, the actuator mechanism 120 of the grating mirror optical component 215 comprises two actuator sub-mechanisms 142. Figs. 29 and 30 show the configuration of each actuator sub-mechanism 120 of the grating mirror optical component 215. Except for a few differences to be discussed next, each actuator sub-mechanism 120 is configured and operates similar to the actuator sub-mechanism 142 shown in Figs. 14 to 16 and described earlier for each filter/lens optical component 106-n of Figs. 2 to 4. One of the actuator sub-mechanisms 142 is configured for clockwise movement along an arc and the other is configured for counter clockwise movement along the arc. Thus, the bias lines 150 and the

contact rails 149 are arc shaped so that [eac] each actuator sub-mechanism 142 can travel along an arc. Furthermore, in the actuator sub-mechanism 142 configured for clockwise movement, the SDAs 144 are aligned for clockwise movement. Conversely, the SDAs 144 are aligned for counter clockwise movement in the actuator sub-mechanism 142 configured for counter clockwise movement. Furthermore, each actuator sub-mechanism 142 includes an insulating attachment bridge 141 that fixedly couples the support frame 143 of the actuator sub-mechanism 142 and the moveable stage 225.

Please amend the paragraph on page 42, beginning at line 9 of the specification as follows:

Furthermore, some of the elements of the optical components 105, 106-n, 215, 218-m, 219-m, 256-m, and 259-m described herein can be used in other applications. For example, the hinges 116, 117, 118, 226, and 229, the support arms 119, and the actuator mechanisms 120 can be used in quasi-optical systems and RF devices, as disclosed in copending PCT Patent Applications Ser. Nos. US00/16021 and US00/16024, having respective attorney docket nos. FP-68000/JAS/SMK and FP-67999/JAS/SMK, with respective titles MEMS TRANSMISSION AND CIRCUIT COMPONENTS and RECONFIGURABLE QUASI-OPTICAL UNIT CELLS, and filed on June 9, 2000. As mentioned earlier, these copending applications are hereby incorporated by reference.